ABSTRACT

A time-division-multiplexed fixed wireless loop system and methods therefor are disclosed. The system comprises a plurality of cells each having a base station and a plurality of terminals. The base station includes a steerable and adjustable multibeam antenna for communicating with each of the terminals, which have fixed antennas. A cell controller associated with each base station allocates communication time slots so as to minimize mutual interference between base station/terminal links sharing the same time slot. Slot assignment is based on regional, periodically updated interference measurements that are stored in data bases.